



Attorney Docket No. 040679-1315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: Takao KAWASAKI et al.

Title: INTERNAL EGR QUANTITY ESTIMATION, CYLINDER INTAKE  
AIR QUANTITY CALCULATION, VALVE TIMING CONTROL,  
AND IGNITION TIMING CONTROL

Appl. No.: 09/912,388

Filing Date: July 26, 2001

Examiner: J. Corrigan

Art Unit: 3748

RECEIVED

APR 17 2003

TECHNOLOGY CENTER R3700

AMENDMENT AND REPLY UNDER 37 C.F.R. § 1.111

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In reply to the Office Action mailed December 16, 2002, please amend the application as follows and consider the following remarks. Enclosed herewith is a Petition for a one-month extension of time to extend the time to respond to April 16, 2003.

In the Claims:

✓  
Please add the following new claims 50-54.

- Sub C1  
B1
50. (New) The apparatus as claimed in Claim 42, wherein the internal EGR quantity estimating section uses, as the exhaust valve closing timing, a target exhaust valve closing timing, for calculating the estimated internal EGR quantity.
51. (New) The apparatus as claimed in Claim 42, wherein the internal EGR quantity estimating section is configured to calculate a base internal EGR quantity in accordance with the exhaust valve closing timing and the engine speed; to set the estimated internal